

For Research Use Only

# CoraLite® Plus 488-conjugated PPARA Monoclonal antibody



Catalog Number:CL488-66826

## Basic Information

<b>Catalog Number:</b> CL488-66826	<b>GenBank Accession Number:</b> BC000052	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5465	<b>CloneNo.:</b> 1G1E10
<b>Source:</b> Mouse	<b>Full Name:</b> peroxisome proliferator-activated receptor alpha	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 52 kDa	
<b>Immunogen Catalog Number:</b> AG7896	<b>Observed MW:</b> 53 kDa	

## Applications

**Tested Applications:**  
FC (Intra)

**Species Specificity:**  
Human, rat

## Background Information

Peroxisome proliferator-activated receptor alpha (PPARA) is a ligand-activated transcription factor that belongs to the PPAR nuclear receptor superfamily. PPARA is essential in the modulation of lipid transport and metabolism, mainly through activating mitochondrial and peroxisomal fatty acid  $\beta$ -oxidation pathways. In addition, PPARA seems to decrease inflammation mainly through direct interaction with NF- $\kappa$ B, causing inhibition of its signaling pathway or reducing the activated levels of NF- $\kappa$ B and subsequent inflammation. Furthermore, PPARA was implicated in the attenuation of oxidative stress in alcoholic liver disease when treated with polyenephosphatidylcholine through downregulation of ROS-generating enzymes such as ethanol-inducible cytochrome P450 2E1 (CYP2E1), acyl-CoA oxidase, and NADPH oxidase. PPARA exists two isoforms and molecular weight of PPARA isoforms are 52 kDa and 22 kDa. The ability of a retinoid X receptor (RXR) to heterodimerize with many nuclear receptors, including LXR, PPAR, NGF1B and RAR, underscores its pivotal role within the nuclear receptor superfamily. Among these heterodimers, PPAR:RXR is considered an important signalling mediator of both PPAR ligands, such as fatty acids, and 9-cis retinoic acid (9-cis RA), an RXR ligand. (PMID: 15103326). PPARA can form Heterodimer with RXRA and molecular weight of Heterodimer is about 110 kDa.

## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

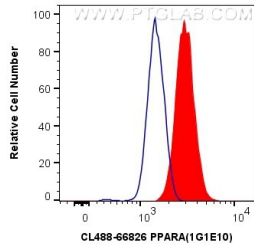
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



1X10<sup>6</sup> A431 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human PPARA (CL488-66826, Clone:1G1E10) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).